

## **REMARKS**

The Office Action dated May 4, 2005 has been received and carefully noted. The following remarks are submitted as a full and complete response thereto. Claims 1-37 are currently pending in the application and are respectfully submitted for consideration.

In the Office Action, claims 1, 8-13, 20-25, and 33-37 were rejected under 35 U.S.C. §102(e) as being anticipated by Walrand (U.S. Patent No. 6,674,760). The rejection is respectfully traversed for the reasons which follow.

Claim 1, upon which claims 2-4 and 8-12 are dependent, recites a method of classifying Internet Protocol (IP) data to be sent from a source apparatus to a destination apparatus in a packet switched network. The method includes the step of receiving the data at a first node, the data comprising a header comprising a list of at least one intermediate node to be visited on a way to the destination apparatus. The method also includes the step of classifying the data at the first node based on an entry in the header.

Claim 13, upon which claims 14-16 and 20-24 are dependent, recites a router for use in a packet switched network for transmission of Internet Protocol (IP) data to be sent from a source apparatus to a destination apparatus. The router includes means for receiving the IP data at a first node, the data comprising a header comprising a list of at least one intermediate node to be visited on a way to the destination apparatus. The router also includes means for classifying the IP data at the first node based on an entry in the header.

Claim 25, upon which claims 26-29 and 33-37 are dependent, recites a router for use in a packet switched network for transmission of Internet Protocol (IP) data to be sent from a source apparatus to a destination apparatus. The router includes a receiving device to receive the IP data at a first node, the data comprising a header comprising a list of at least one intermediate node to be visited on a way to the destination apparatus. The router further includes a processor device coupled to the receiving device for receiving the IP data and for classifying the data at the first node based on an entry in the header.

As will be discussed below, Walrand fails to disclose or suggest all of the elements of the claims, and therefore fails to provide the features discussed above.

Walrand discloses a system and method for implementing end-to-end QoS for both inter-subnet and intra-subnet communications. The first accessed node in a subnetwork that receives an IP packet, classifies the packet based upon the IP destination address, the IP source address, and a class of service identifier. Based upon this classification, the node recognizes which end-to-end connection the packet belongs to. Once classified, the node can allocate the resources necessary or otherwise provide a quality of service for the specific connection classification.

Applicants respectfully submit that Walrand fails to disclose or suggest all of the elements of the currently pending claims. Specifically, Walrand does not disclose or suggest receiving data at a first node, the data comprising a header comprising a list of at least one intermediate node to be visited on a way to the destination apparatus, as recited in present claims 1, 13, and 25. Walrand only discloses that the network communicates

data through the use of IP packets, each of which include an IP header 200 (see Figure 2). Walrand further discloses that the IP header may include a source address field 208, a destination address field 210, and a type of service field 206 (Walrand, Column 3, lines 15-27). However, Warland makes no mention of a list of intermediate nodes included in the IP header. Therefore, Walrand does not disclose or suggest that the IP header includes a list of at least one intermediate node to be visited on a way to the destination apparatus, as recited in the present claims. As such, Walrand fails to disclose or suggest all of the elements of claims 1, 13, and 25. For at least the reasons discussed above, Applicants respectfully request that the rejection of claims 1, 13, and 25 be withdrawn.

Applicants note that claims 8-12, 20-24, and 33-37 are dependent upon claims 1, 13, and 25, respectively. Therefore, claims 8-12, 20-24, and 33-37 should be allowed for at least their dependence upon claims 1, 13, and 25, and for the specific limitations recited therein.

The Office Action rejected claims 2-4, 14-16, 26-28, and 29 under 35 U.S.C. §103(a) as being unpatentable over Walrand in view of Jorgensen (U.S. Patent No. 6,452,915). The Office Action took the position that Walrand discloses all of the elements of the claims, with the exception of the data for IPv6. The Official Action then relies upon Jorgensen as allegedly curing this deficiency in Walrand. The above rejection is respectfully traversed for the reasons which follow.

Walrand is discussed above. Jorgensen discloses an IP flow classification system for grouping IP flows in a packet-centric wireless point to multi-point

telecommunications system. The classification system includes a wireless base station coupled to a first data network, one or more host workstations coupled to the first data network, one or more subscriber customer premise equipment (CPE) stations in wireless communication with the wireless base station over a shared bandwidth using a packet-centric protocol, and one or more subscriber workstations coupled to each of the subscriber CPE stations over a second network. A resource allocation device optimizes end-user quality of service (QoS) and allocates shared bandwidth among the subscriber CPE stations, and an analyzing and scheduling device analyzes and schedules internet protocol (IP) flow over the shared wireless bandwidth.

Claims 2-4, 14-16, 26-28, and 29 are dependent upon claims 1, 13, and 25, respectively. As discussed above, Walrand fails to disclose or suggest all of the elements of claims 1, 13, and 25. Furthermore, Jorgensen also does not disclose or suggest that the IP header includes a list of at least one intermediate node to be visited on a way to the destination apparatus and, therefore, fails to cure the deficiencies in Walrand with respect to claims 1, 13, and 25. Thus, claims 2-4, 14-16, 26-28 and 29 should be allowed for at least their dependence upon claims 1, 13, and 25, and for the specific limitations recited therein.

In the Office Action, claims 5-7, 17-19, and 30-32 were rejected under 35 U.S.C. §103(a) as being unpatentable over Walrand in view of Jorgensen and further in view of Narad (U.S. Patent No. 6,157,955). The Office Action took the position that Walrand and Jorgensen disclose all of the elements of the claims, with the exception of the entry

being provided within one of LSRR and SSRR of the data for IPv4. The Office Action then relies upon Narad as allegedly curing this deficiency in Walrand and Jorgensen. The above rejection is respectfully traversed for the reasons which follow.

Claim 5, upon which claims 6 and 7 are dependent, recites a method of classifying Internet Protocol (IP) data to be sent from a source apparatus to a destination apparatus in a packet switched network. The method includes the step of receiving the data at a first node, the data comprising a header comprising a list of at least one intermediate node to be visited on a way to the destination apparatus. The method also includes the step of classifying the data at the first node based on an entry in the header. The entry is provided within one of LSRR and SSRR of the data for IPv4.

Claim 17, upon which claims 18 and 19 are dependent, recites a router for use in a packet switched network for transmission of Internet Protocol (IP) data to be sent from a source apparatus to a destination apparatus. The router includes means for receiving the IP data at a first node, the data comprising a header comprising a list of at least one intermediate node to be visited on a way to the destination apparatus. The router further includes means for classifying the IP data at the first node based on an entry in the header. The entry in the header is provided within one of LSRR and SSRR of the data for IPv4.

Claim 30, upon which claims 31 and 32 are dependent, recites a router for use in a packet switched network for transmission of Internet Protocol (IP) data to be sent from a source apparatus to a destination apparatus. The router includes a receiving device to

receive the IP data at a first node, the data comprising a header comprising a list of at least one intermediate node to be visited on a way to the destination apparatus. The router further includes a processor device coupled to the receiving device to receive the IP data and to classify the data at the first node based on an entry in the header provided within one of LSRR and SSRR of the data for IPv4.

As will be discussed below, Walrand, Jorgensen, and Narad, whether viewed singly or combined, fail to disclose or suggest all of the elements of the claims, and therefore fail to provide the features discussed above.

Walrand and Jorgensen are discussed above. Narad discloses a packet processing system including a policy engine with a classification unit. The steps of packet processing are divided into a multiplicity of pipeline stages and provided with different functional units for different stages. Custom, specialized Classification Engines, which are micro-programmed processors optimized for the various functions common in predicate analysis and table searches, are provided, and are each used as pipeline stages in different flows. In addition, a general-purpose microprocessor is provided for executing the arbitrary actions desired by these applications, and a tightly-coupled encryption coprocessor is provided to accelerate common network encryption functions.

Claims 5, 17, and 30 include the limitation of receiving data at a first node, the data comprising a header including a list of at least one intermediate node to be visited on a way to the destination apparatus. As discussed above in reference to claims 1, 13, and 25, Applicants respectfully submit that the combination of Walrand and Jorgensen fails to

disclose or suggest this limitation of the claims. Furthermore, Narad also does not disclose or suggest this limitation of the claims, and therefore fails to cure the deficiency in Walrand and Jorgensen. Therefore, Applicants submit that Walrand, Jorgensen and Narad, whether considered alone or in combination, do not disclose or suggest that the header includes a list of at least one intermediate node to be visited on a way to the destination apparatus, as recited in claims 5, 17, and 30. As such, Applicants respectfully request that the rejection of claims 5, 17, and 30 be withdrawn.

Claims 6-7, 18-19, and 31-32 are dependent upon claims 5, 17, and 30, respectively. As such, Applicants respectfully assert that claims 6-7, 18-19, and 31-32 should be allowed for at least their dependence upon claims 5, 17, and 30, and for the specific limitations recited therein.

Applicants respectfully submit that the cited prior art fails to disclose or suggest critical and important elements of the claimed invention. These distinctions are more than sufficient to render the claimed invention unanticipated and unobvious. It is therefore respectfully requested that all of claims 1-37 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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Enclosures: Revocation and New Power of Attorney